





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Docket No.:

2874-B

ANDERSON and GALIBERT

Confirmation No.

6890

Frial No: 09/705,985

Group Art Unit:

1646

Filed:

November 3, 2000

Examiner:

N. Basi

For:

METHOD OF INHIBITING OSTEOCLAST ACTIVITY

AMENDMENT and RESPONSE TO PAPER NO. 12

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TECH CENTER 1600/2900

APR 1 4 2003

Commissioner for Patents Washington, DC 20231

In response to the Examiner's Action (Paper No. 12) mailed November 4, 2002, please enter the following amendments into the application:

In the Claims:

Please amend the claims as follows:

- 5. (Three times amended) A method of inhibiting RANKL-induced osteoclastogenesis in a patient in need thereof, comprising administering to said patient a soluble RANK polypeptide composition, wherein said patient suffers from a condition selected from the group consisting of bone cancer, multiple myeloma, melanoma and breast cancer, and further wherein the soluble RANK polypeptide is capable of binding to a RANKL polypeptide that consists of amino acids 1-317 of SEQ ID NO:8 and is selected from the group consisting of:
- (a) a polypeptide encoded by a DNA that encodes a protein comprising amino acids 33-196 of SEQ ID NO:2;
- (b) a polypeptide encoded by a DNA that is capable of hybridizing to a DNA consisting of the nucleotide sequence shown in SEQ ID NO:1 under stringent conditions, wherein stringent conditions comprise hybridizing at 63°C in 6 x SSC;
- (c) a polypeptide that is at least 80% identical in amino acid sequence to a RANK polypeptide comprising amino acids [1]33-213 of SEQ ID NO:2; and
- (d) a polypeptide comprising amino acids 33-213 of SEQ ID NO:2, and further wherein said composition is administered in amounts sufficient to inhibit RANKL-induced osteoclastogenesis in said patient.
- 9. (Twice amended) The method of claim 5, wherein the soluble RANK further comprises a polypeptide selected from the group consisting of an immunoglobulin

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